

Application Serial No.: 10/593,607

Office Action dated: August 3, 2010

Response to Office Action dated: November 3, 2010

DO NOT ENTER: /A.H./ 03/03/2011

AMENDMENTS TO THE CLAIMS

Please replace all previous versions of the claims with the following listing of claims:

1-4. (Canceled)

5. (Previously Presented) The chemical liquid supply apparatus according to claim 9, wherein the flexible film is provided in a driving room filled with a driving medium, the flexible film being expanded by decreasing a volume or pressure of the driving medium and the flexible film being shrunk by increasing the volume or pressure of the driving medium.

6. (Original) The chemical liquid supply apparatus according to claim 5, wherein the nozzle assembly is fixed to a movable arm moving above a workpiece on which the chemical liquid is dispensed.

7. (Previously Presented) The chemical liquid supply apparatus according to claim 5, wherein the nozzle assembly is fixed to a movable arm moving above a workpiece on which the chemical liquid is dispensed, a driving device for increasing/decreasing the volume or pressure of the driving medium with which the driving room is filled is located at a portion other than the movable arm, and the driving device and the driving room are connected to each other via a tube in which the driving medium flows.

8. (Original) The chemical liquid supply apparatus according to claim 7, wherein the driving medium is an incompressible medium, the flexible film is expanded by decreasing the volume of the incompressible medium in the driving room, and the flexible film is shrunk by increasing the volume of the incompressible medium.

9. (Currently Amended) A chemical liquid supply apparatus in which a chemical liquid accommodated in a chemical liquid tank is dispensed from a nozzle of a nozzle body, the apparatus comprising:

a pump having an elastically deformable and tube-shaped flexible film forming a pump room, whose one end communicates with a primary-side chemical liquid flow path communicating with the chemical liquid tank and whose other end communicates with a secondary-side chemical liquid flow path communicating with the nozzle body, wherein when the flexible film expands the volume of the pump room, the chemical liquid in the chemical liquid tank is sucked into the pump room, and when the flexible film shrinks the volume of the pump room, the chemical liquid in the pump room is dispensed to the nozzle body;

a nozzle assembly, in which the pump, the nozzle body, a primary-side valve for opening/closing the primary-side chemical liquid flow path, and a secondary-side valve for opening/closing the secondary-side chemical liquid flow path are provided;

a double tube including an internal tube containing the primary-side chemical liquid flow path, and an external tube in which the internal tube is disposed and in which temperature control water flows in a same flow direction as that of the chemical liquid for adjusting a temperature of the chemical liquid passing through the internal tube, the temperature control water being temperature-controlled by a temperature controller;

a temperature control water flow path formed in the pump so as to communicate with the external tube for adjusting the temperature of the chemical liquid in the pump room by the temperature control water flowing from the external tube;

a first coupling block provided in the nozzle assembly and connected to one end portion of the double tube, with a first branch flow path formed in the first coupling block, which causes the temperature control water from the external tube to flow into the temperature control water flow path formed in the pump;

a return path tube connected separately from the double tube between the nozzle assembly and the temperature controller; and

a second coupling block connected between the other end portion of the double tube and [[a]] the chemical liquid tank, with a second branch flow path formed in the second coupling block, which causes the temperature control water

from the temperature controller to flow into the external tube.

10-12. (Canceled)

13. (New) A chemical liquid supply apparatus in which a chemical liquid accommodated in a chemical liquid tank is dispensed from a nozzle of a nozzle body, the apparatus comprising:

a pump having an elastically deformable and tube-shaped flexible film forming a pump room, whose one end communicates with a primary-side chemical liquid flow path communicating with the chemical liquid tank and whose other end communicates with a secondary-side chemical liquid flow path communicating with the nozzle body, wherein when the flexible film expands the volume of the pump room, the chemical liquid in the chemical liquid tank is sucked into the pump room, and when the flexible film shrinks the volume of the pump room, the chemical liquid in the pump room is dispensed to the nozzle body;

a nozzle assembly, in which the pump, the nozzle body, a primary-side valve for opening/closing the primary-side chemical liquid flow path, and a secondary-side valve for opening/closing the secondary-side chemical liquid flow path are provided;

a double tube including an internal tube containing the primary-side chemical liquid flow path, and an external tube in which the internal tube is disposed and in which temperature control water flows in a same flow direction as that of the chemical liquid for adjusting a temperature of the chemical liquid passing through the internal tube, the temperature control water being temperature-controlled by a temperature controller;

a temperature control water flow path formed in the pump so as to communicate with the external tube for adjusting the temperature of the chemical liquid in the pump room by the temperature control water flowing from the external tube;

a first coupling block provided in the nozzle assembly and connected to one end portion of the double tube, with a first branch flow path formed in the first coupling block, which causes the temperature control water from the

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external tube to flow into the temperature control water flow path formed in the pump;

a return path tube connected separately from the double tube between the nozzle assembly and the temperature controller; and

a second coupling block connected between the other end portion of the double tube and the chemical liquid tank, with a second branch flow path formed in the second coupling block, which causes the temperature control water from the temperature controller to flow into the external tube,

wherein the flexible film is provided in a driving room filled with a driving medium, the flexible film being expanded by decreasing a volume or pressure of the driving medium and the flexible film being shrunk by increasing the volume or pressure of the driving medium, and

the temperature control water, which flows around an outer circumference of the driving room filled with the driving medium, causes temperatures of the chemical liquid and the driving medium to be kept constant.